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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,377	10/17/2000	Noboru Aiba	JG-KM-4818D	2920

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JULES E. GOLDBERG, ESQ.  
REED SMITH LLP  
599 LEXINGTON AVENUE  
29TH FLOOR  
NEW YORK, NY 10022

EXAMINER

TAWFIK, SAMEH

ART UNIT	PAPER NUMBER
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3721

5W

DATE MAILED: 02/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/690,377

Applicant(s)

AIBA ET AL.

Examiner

Sameh H. Tawfik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 1/12/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 6 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coplan et al. (4,017,030) in view of Sakurada et al. (5,993,843).

Coplan discloses a method for preparing an annular sustained release pheromone-dispenser whose end portions are connected to each other (Figs. 3a and 3b); comprising the steps of arranging a plurality of continuous plastic tubes (Figs. 3a and 3b) wherein the tubes have a diffusivity and a permeability to a liquid synthetic (Abstract lines 1-3) which are filled with a liquid synthetic sex pheromone (Fig. 1); fusing them at a predetermined pitches by heating under a pressure and then cutting them at each fused portion to produce a dispenser composed of two side by side tubes having closely sealed both end portions (Figs. 3a and 3b; column 8, lines 53-57). Coplan does not disclose that pulling apart the center portion to separate the central portion of each tube from the central portion of the other tube. However, Sakurada discloses a similar method of preparing an annular sustained release pheromone dispenser comprising the step of pulling apart the central portion to separate the central portion of each tube from the central portion of the other tube, see for example (Fig. 1; via 18; column 14, lines 65-67 and column 15, lines 1 and 2) to provide a biodegradable sustained release preparation which can during

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application carry out sustained release of its active ingredient stably at a desired release rate for a long period of time (column 3, lines 50-55).

Coplan does not disclose that cutting the tubes at a middle of each such fused portion. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Coplan's method by cutting the tubes at a middle of each such fused portion, since applicant has not disclosed that cutting the tubes at a middle of each such fused portion solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with Coplan cutting line by the end of the fusing portion (Fig. 3a).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Coplan's method for preparing an annular sustained release pheromone-dispenser by having the step of pulling apart the central portion to separate the central portion of each tube from the central portion of the other tube, as suggested by Sakurada, in order to provide a biodegradable sustained release preparation which can during application carry out sustained release of its active ingredient stably at a desired release rate for a long period of time.

Regarding claim 6: Coplan discloses the plurality of plastic tubes are fused by heating under pressure after sandwiching the portion to be fused between a pair of pieces made of a plastic (Figs. 12 and 13; column 8, lines 53-58).

### ***Response to Arguments***

Applicants argue in page 3 of the arguments that Coplan teaches a pheromone dispenser that delivers pheromone through evaporation, in contrast to the present invention, which calls for

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the preparation of an annular sustained release pheromone dispenser wherein the tubes have a diffusivity and a permeability to a liquid synthetic sex pheromone. The examiner believes that Coplan's meets the claimed language of "...the tubes have a diffusivity and a permeability to a liquid synthetic sex pheromone.." via permeability to a liquid through the opening of the tube.

Applicants further argue in page 4 of the arguments that the claimed method is able to release liquid pheromone *through the diffusible and permeable wall* of the dispenser into the air and even *though the upper end is closed*. The examiner believes applicants argue about something was not mentioned in the claim language.

Applicants argue in page 4 that Coplan discloses filament tube has one open end and one closed end. The examiner believes that claim 9 is not clearly claiming sealing both ends of the tube. (claim 9, line 6) "...side by side tubes having closely sealed both end portions..." could be understood as sealing both upper or lower ends of the side by side tubes and not necessarily the upper and lower ends of the tubes, the examiner believes that the claim is broad and what applicants arguing about is not clearly claimed.

Further applicants argue that the tubes as claimed are plural and fused to connect to each other through a web and later the center portion of the tubes is separated to form a ring. The examiner believes applicant are not clearly claiming the connection of the tubes through a web, even though, Coplan discloses plural tubes connect to each other through a web (Fig. 3a and 3b; via support) and Sakurada's reference clearly discloses the tubes are separated to form a ring (Fig. 18). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Coplan's method for preparing an annular sustained release pheromone-dispenser by having the step of pulling apart the central portion to

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separate the central portion of each tube from the central portion of the other tube, as suggested by Sakurada, in order to provide a biodegradable sustained release preparation which can during application carry out sustained release of its active ingredient stably at a desired release rate for a long period of time.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sameh H. Tawfik whose telephone number is (703) 308-2809. The examiner can normally be reached on Tuesday - Friday from 8:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on (703) 308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST.



Mickey Yu  
Supervisory Patent Examiner  
Group 3700